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KENYON & KENYON LLP RIVERPARK TOWERS, SUITE 600 333 W. SAN CARLOS ST. SAN JOSE, CA 95110				JOO, JOSHUA
ART UNIT		PAPER NUMBER		
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			08/11/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/891,167	RUSE ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	JOSHUA JOO	2454	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 13 May 2009.

2a) This action is **FINAL**.                    2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1,2,4-8,10-14 and 16-18 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1,2,4-8,10-14 and 16-18 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 26 June 2001 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application

6) Other: \_\_\_\_\_.

***Detailed Action***

This Office action is in response to Applicant's communication filed on 05/13/2009.

Claims 1-2, 4-8, 10-14, 16-18 are pending for examination.

**Response to Arguments**

Applicant's arguments filed 05/13/2009 have been fully considered but they are not persuasive.

Applicant argued that:

(1) Editing and modifying a generic "parameter" information parameter and accessing "time" information found in the user profile are not the same as a trend analysis table further comprising a user override location that indicates probabilities of successful contact for each location are to be ignored and the override location is to be used for contact.

In response, Horvitz teaches of a user mechanism 202 comprising a user notification preferences store and a user context module including user context profile store (Paragraph 0062). Horvitz teaches that the user context module provides a best guess about current context information (Paragraph 0063). On paragraph 0055 and 0080, Horvitz teaches of a user profile in a user mechanism 202 indicating that a preferred location is to be used for contact instead of the decision-theoretic analysis or a probabilistic profile. The user mechanism provides an indication that a preferred location that is used for contact and disregards the decision-theoretic analysis and the probabilistic profile.

(2) The references do not describe at least the amended limitations comprising "wherein said results are stored in order of probability of highest to lowest and if the transfer is unsuccessful, transferring to a next highest priority contact point for the user".

In response, Examiner respectfully disagrees that the references do not teach the amended limitations. Singh teaches,

“At the time of message receipt, host server 10 ranks each of the devices 16 registered by the subscriber to determine which has the highest probability that the subscriber will receive the message (block 302).” (col. 5, lines 13-16)

“(20) After ranking each of the devices 16, master agent 21 delivers the message to the highest ranked device (block 304). The message will remain pending at the device 16 for a predetermined period of time waiting to be accessed by the subscriber (block 306). If the subscriber accesses the message, the subscriber agent at the device signals the master agent 21 and the process is terminated (block 310). If the message is not accessed within the time period, subscriber agent 19 signals the non-accessed message status to the master agent 21 and the message is deleted from the device 16 (block 312). Master agent 21 then sends the message to the next ranked device 16 (block 314). If the message is accessed, the process is terminated (block 310). If the message is not accessed, the process continues until the subscriber receives the message.” (col. 6, lines 3-17)

According to above passages, Singh teaches of determining a probability of contacting a user and ranking a result of the probability in order to determine a highest probability of contacting the user. A message is first delivered to the highest ranked device, and if unsuccessful, a message is delivered to the next ranked device, which suggests that the ranking is in an order of a probability of highest to lowest. Therefore, Singh teaches the feature of results being stored in an order of probability from highest to lowest. Singh also teaches of transferring the message to the highest ranked device and if the message is not accessed at the highest ranked device, then the message is transferred to the next highest ranked device, which is the next highest probability contact point. Since the message is not accessed within a time period, the transfer of the message to the highest ranked device is considered as unsuccessful. Therefore, Singh teaches the feature of if the transfer is unsuccessful, transferring to a next highest probability contact point for the user.

(3) The references fail to teach or suggest transferring incoming messages based on user location preferences based on the message source as well.

In response, Examiner respectfully disagrees that the references do not teach the amended limitations. Horvitz’s invention deals with transferring incoming messages based on user location preferences. Horvitz teaches of determining which notifications to deliver to which of the notification

sinks based on information stored in a user mechanism (Paragraphs 0039, 0067). The determination of which notification to send may be based on a source of the notification. For instance, Horvitz teaches of sending notifications according to context (Paragraphs 0007-0008) and teaches of determining whether a source is relevant for a given context (Paragraph 0069). Horvitz also teaches of storing a user notification preference that provides schema templates and attributes for different sources (Paragraph 0072); and utilizing notification parameters provided in the schema of sources to identify which notifications to convey to which of the notification sinks (Paragraph 0080). Therefore, incoming messages are transferred based on user location preferences based on the message source.

### **Claim Objections**

Claims 1-2, 4-8, 10-14, 16-18 are objected to because of the following informalities:

- i) Regarding claims 1 and 13, "the time of a day and day of week" should be changed to "an associated time of day and day of week" since there is no prior basis to refer to "the time of day and day of week" and to provide clear basis for "the associated time of day and day of week".
- ii) Regarding claim 7, "the response" should be changed to "the responses" to clearly refer to "the responses" to clearly refer to "responses". Alternatively, "the response" should be changed to "each response" as similarly recited in claim 1.

Appropriate correction is required.

### **Claim Rejections - 35 USC § 112**

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-2, 4-8, 10-14, 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- i) Regarding claims 1, 7, and 13, “the message source” has insufficient antecedent basis.

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-8, 10-14, 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Horvitz et al, US Publication #2007/0011314 (Horvitz hereinafter), in view of Foladare et al. US Patent #6,311,210 (Foladare hereinafter) and Singh, US Patent #6,405,035 (Singh hereinafter).

As per claim 1, Horvitz teaches substantially the invention as claimed including a method for forwarding messages, comprising:

monitoring locations of “activities” along with the time of day and day of week (Paragraphs 0026; 0028; 0048. Discern user location. Observe user location and activities time of day and day of week.);

storing “activities” along with the associated time of day and day of week in a database (Paragraph 0026; 0028. Store user context information regarding location and activities per time of day and day of the week.);

performing a statistical trend analysis on a user basis to determine a probability of contacting the user for a given time of day and day of week at a given location (Paragraph 0027. Infer parameters that indicate likelihood user is in different locations. Paragraph 0028. Use statistical model to determine likelihood user is in a state. Paragraph 0053. Performs analysis on information provided by sinks including user’s location. Paragraph 0064. Probabilistic inference/profile.);

storing a trend analysis table results of the statistical trend analysis performed (Paragraphs 0028; 0039-0010; 0063. User context profile used to make decisions. Store priori about user location and user activity. Paragraph 0063. User context profile store captures information such as deterministic or probabilistic profile.); and

transferring incoming messages based on a location in the trend analysis with the highest probability of contacting the user (Paragraph 0040. Determine best device for relay notification. Paragraph 0063. Best guess about user context information.) and user location preferences based on the message source (Paragraphs 0067, 0069. Indicate whether source is relevant for a context. Paragraphs 0072, 0080. Notification parameters provided by schema of sources.),

wherein said trend analysis table further comprises a user override location that indicates possibilities of successful contact for each location are to be ignored and the override location is to be used for contact (Paragraphs 0063. User mechanism comprises user profile and best guess about current context. Paragraphs 0055; 0080. The user profile indicates a preference that is used in lieu of the decision-theoretic analysis.).

Horvitz teaches of monitoring locations of activities but does not specifically teach the activities to include responses to incoming messages. Horvitz does not specifically teach of wherein said results are stored in order of probability of highest to lowest and if the transfer is unsuccessful, transferring to a next highest priority contact point for the user.

Foladare teaches of sending messages to devices and monitoring access of incoming messages by a device (col. 3, lines 56-60; col. 5, line 66-col. 6, line 7.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the monitoring of activities as taught by Horvitz to include monitoring response to messages as taught by Foladare. The motivation for the suggested combination is that Foladare's teachings of monitoring access of incoming messages would provide a specific activity for

determining and monitoring the user's location and activity. Foladare's teachings would also provide message/notification sending based on the type of user device (col. 3, lines 45-53).

Singh teaches a similar invention for sending messages using a probabilistic approach, wherein results of a statistical trend analysis are stored in order of probability of highest to lowest (col. 5, lines 13-16. Rank each of the devices to determine device with highest probability. col. 6, lines 3-5. Deliver message to highest rank device.) and if a transfer is unsuccessful, transferring to a next highest priority contact point for the user (col. 6, lines 10-17. If the message is not accessed, send message to the next ranked device.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the results as taught by Horvitz to be stored in order of probability of highest to lowest and if a transfer is unsuccessful, transferring to a next highest priority contact point for the user as taught by Singh. The motivation for the suggested combination is that Singh's teachings would improve the suggested system by increasing the probability that a user will receive a message in a timely manner (col. 1, lines 53-55).

As per claim 7, Horvitz teaches substantially the invention as claimed including a system for forwarding messages, comprising:

a server comprising a computer storage medium (Paragraph 0028; claim 1. System to stored information.);

a monitoring module stored on the computer storage medium to monitor "activities" by users and store the location of the response with a time stamp in a database (Paragraphs 0026; 0028; 0048. Discern user location. Paragraph 0026; 0028. Store user context information regarding location and activities per time of day and day of the week. Paragraph 0081. Users);

a trend analysis module stored on the computer storage medium to perform a statistical probability analysis on the location and time stamp data in the database and determine the probability of contacting the user at each of a plurality of locations for a given time of day (Paragraph 0027. Infer parameters that indicate likelihood user is in different locations. Paragraph 0028. Use statistical model to determine likelihood user is in a state. Paragraph 0053. Performs analysis on information provided by sinks including user's location. Paragraph 0064. Probabilistic inference/profile.) and storing the probability of contacting the user at each of a plurality of locations in a trend analysis table (Paragraphs 0028; 0039-0040; 0063. User context profile store used to make decisions. Store priori about user location and user activity. Paragraph 0063. User context profile store captures information such as deterministic or probabilistic profile.); and

a forwarding module stored on the computer storage medium to receive an incoming message and forward the incoming message based on a location with the highest probability of contacting the user as designated in the trend analysis table (Paragraph 0040. Determine best device for relay notification. Paragraph 0063. Best guess about user context information.) and user location preferences based on the message source (Paragraphs 0067, 0069. Indicate whether source is relevant for a context. Paragraphs 0072, 0080. Notification parameters provided by schema of sources.),

wherein said trend analysis table further comprises a user override location that indicates possibilities of successful contact for each location are to be ignored and the override location is to be used for contact (Paragraphs 0063. User mechanism comprises user profile and best guess about current context. Paragraphs 0055; 0080. The user profile indicates a preference that is used in lieu of the decision-theoretic analysis.).

Horvitz teaches of monitoring locations of activities but did not specifically teach the activities to include responses to messages received. Horvitz does not specifically teach of wherein results are stored

in order of probability of highest to lowest and if the transfer is unsuccessful, transferring to a next highest priority contact point for the user.

Foladare teaches of monitoring access of incoming messages by a device (col. 3, lines 56-60; col. 5, line 66-col. 6, line 7).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the monitoring of activities as taught by Horvitz to include monitoring response to messages as taught by Foladare. The motivation for the suggested combination is that Foladare's teachings of monitoring access of incoming messages would provide a specific activity for determining and monitoring the user's location and activity. Foladare's teachings would also provide message/notification sending based on the type of user device (col. 3, lines 45-53).

Singh teaches a similar invention for sending messages using a probabilistic approach, wherein results of a statistical trend analysis are stored in order of probability of highest to lowest (col. 5, lines 13-16. Rank each of the devices to determine device with highest probability. col. 6, lines 3-5. Deliver message to highest rank device.) and if a transfer is unsuccessful, transferring to a next highest priority contact point for the user (col. 6, lines 10-17. If the message is not accessed, send message to the next ranked device.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the results as taught by Horvitz to be stored in order of probability of highest to lowest and if a transfer is unsuccessful, transferring to a next highest priority contact point for the user as taught by Singh. The motivation for the suggested combination is that Singh's teachings would improve the suggested system by increasing the probability that a user will receive a message in a timely manner (col. 1, lines 53-55).

As per claim 13, Horvitz teaches substantially the invention as claimed including an article of manufacture comprising a computer-readable storage medium having stored thereon instructions to be executed by a processor, the instructions which, when executed, cause the processor to perform a method of forwarding messages, comprising:

monitoring locations of “activities” along with the time of day and day of week (Paragraphs 0026; 0028; 0048. Discern user location. Observe user location and activities time of day and day of week.);

storing “activities” along the associated time of day and day of week in a database (Paragraph 0026; 0028. Store user context information regarding location and activities per time of day and day of the week.);

performing a statistical trend analysis on a user basis to determine a probability of contacting the user for a given time of day and day of week at a given location (Paragraph 0027. Infer parameters that indicate likelihood user is in different locations. Paragraph 0028. Use statistical model to determine likelihood user is in a state. Paragraph 0053. Performs analysis on information provided by sinks including user’s location. Paragraph 0064. Probabilistic inference/profile.);

storing a trend analysis table results of the statistical trend analysis performed (Paragraphs 0028; 0039-0010; 0063. User context profile used to make decisions. Store priori about user location and user activity. Paragraph 0063. User context profile store captures information such as deterministic or probabilistic profile.); and

transferring incoming messages based on a location in the trend analysis with the highest probability of contacting the user (Paragraph 0040. Determine best device for relay notification. Paragraph 0063. Best guess about user context information.), and user location preferences based on the message source (Paragraphs 0067, 0069. Indicate whether source is relevant for a context. Paragraphs 0072, 0080. Notification parameters provided by schema of sources.)

wherein said trend analysis table further comprises a user override location that indicates possibilities of successful contact for each location are to be ignored and the override location is to be used for contact (Paragraphs 0063. User mechanism comprises user profile and best guess about current context. Paragraphs 0055; 0080. The user profile indicates a preference that is used in lieu of the decision-theoretic analysis.).

Horvitz teaches of monitoring locations of activities but does not specifically teach the activities to include responses to incoming messages. Horvitz does not specifically teach of wherein said results are stored in order of probability of highest to lowest and if the transfer is unsuccessful, transferring to a next highest priority contact point for the user.

Foladare teaches of sending messages to devices and monitoring access of incoming messages by a device (col. 3, lines 56-60; col. 5, line 66-col. 6, line 7.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the monitoring of activities as taught by Horvitz to include monitoring response to messages as taught by Foladare. The motivation for the suggested combination is that Foladare's teachings of monitoring access of incoming messages would provide a specific activity for determining and monitoring the user's location and activity. Foladare's teachings would also provide message/notification sending based on the type of user device (col. 3, lines 45-53).

Singh teaches a similar invention for sending messages using a probabilistic approach, wherein results of a statistical trend analysis are stored in order of probability of highest to lowest (col. 5, lines 13-16. Rank each of the devices to determine device with highest probability. col. 6, lines 3-5. Deliver message to highest rank device.) and if a transfer is unsuccessful, transferring to a next highest priority contact point for the user (col. 6, lines 10-17. If the message is not accessed, send message to the next ranked device.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings for the results as taught by Horvitz to be stored in order of probability of highest to lowest and if a transfer is unsuccessful, transferring to a next highest priority contact point for the user as taught by Singh. The motivation for the suggested combination is that Singh's teachings would improve the suggested system by increasing the probability that a user will receive a message in a timely manner (col. 1, lines 53-55).

As per claim 2, Horvitz teaches the invention of claim 1, wherein said trend analysis table comprises a user identification, a plurality of times a day and days of week with locations of contact and probabilities of successful contact associated with each locations (Paragraphs 0026; 0065. User profile can be of locations and activities per the time of day and day of the week. Paragraph 0027. Infer likelihood user is in different locations. Paragraph 0040. Determine best device for relay notification. Paragraph 0063. Probabilistic profile).

As per claim 4, Horvitz, Foladare, and Singh taught the invention defined in claim 1. Horvitz further teaches the invention of wherein the incoming messages and responses are from PSTN telephone, cellular telephone, pager, fax, voice mail, e-mail or other voice or digital communication format (Paragraph 0030. Email. Paragraphs 0021; 0038. Cell phone).

As per claim 5, Horvitz, Foladare, and Singh taught the invention defined in claim 4. Horvitz further teaches the invention comprising checking the user override location in the trend analysis table and transmitting incoming messages to the user override location when set (Paragraphs 0055; 0080. The user profile indicates a preference that is used in lieu of the decision-theoretic analysis.).

As per claim 6, Horvitz teaches the invention of claim 4 comprising: contacting the user at the location with the highest probability of successful contact associated with the location. (Paragraph 0040. Determine best device for relay notification. Paragraph 0063. Best guess about user context information.). Horvitz does not specifically teach of contacting the user at the location with second highest probability of success when unable to contact the user at the location with the highest probability of success.

Singh teaches a similar system comprising of contacting a user at the location with the second highest probability of success when unable to contact the user at a device with the highest probability of success (col. 6, lines 1-14. Send message to highest ranked device. If the subscriber doesn't access the message of the first device, the message is send to the next ranked device.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the suggested system with the teachings of Singh to contact a user at a location with the second highest probably of success when unable to contact the user at a device with the highest probability of success. The motivation for the suggested combination is that Singh's teachings would improve the suggested system by increasing the possibility that the user receives a message by forwarding the message to more than one device and ensuring that the client receives the message (col. 6, lines 14-17).

As per claim 8, Horvitz teaches the invention of claim 7, wherein the database further comprises: a trend analysis table comprises a user identification, a plurality of times a day and days of week with locations of contact and probabilities of successful contact associated with each locations (Paragraphs 0026; 0065. User profile can be of locations and activities per the time of day and day of the week. Paragraph 0027. Infer likelihood user is in different locations. Paragraph 0040. Determine best device for relay notification. Paragraph 0063. Probabilistic profile).

As per claim 10, Horvitz, Foladare, and Singh taught the invention defined in claim 7. Horvitz further teaches the invention of wherein the responses are from PSTN telephone, cellular telephone, pager, fax, voice mail, e-mail or other voice or digital communication format (Paragraph 0030. Email. Paragraphs 0021; 0038. Cell phone).

As per claim 11, Horvitz, Foladare, and Singh taught the invention defined in claim 10. Horvitz further teaches the invention wherein the forwarding module checks an override location specified by a user and forwards all incoming message to the user override location(Paragraphs 0055; 0080. The user profile indicates a preference that is used in lieu of the decision-theoretic analysis.).

As per claim 12, Horvitz teaches the invention of claims 10, wherein the forwarding module will attempt to contact the user at the location with the highest probability of successful contact associated with the location. (Paragraph 0040. Determine best device for relay notification. Paragraph 0063. Best guess about user context information.). Horvitz does not specifically teach the system wherein a module proceed to contact the user at the location with second highest probability of success when the contacting the user at the location with the highest probability of contact fails.

Singh teaches a similar system comprising of contacting a user at the location with the second highest probability of success when unable to contact the user at a device with the highest probability of success (col. 6, lines 1-14. Send message to highest ranked device. If the subscriber doesn't access the message of the first device, the message is send to the next ranked device.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the suggested system with the teachings of Singh to contact a user at a location with the second highest probably of success when unable to contact the user at a device with the highest

probability of success. The motivation for the suggested combination is that Singh's teachings would improve the suggested system by increasing the possibility that the user receives a message by forwarding the message to more than one device and ensuring that the client receives the message (col. 6, lines 14-17).

As per claim 14, Horvitz, Foladare, and Singh taught the invention of claim 13. Horvitz further teaches, wherein said trend analysis table comprises a user identification, a plurality of times a day and days of week with locations of contact and probabilities of successful contact associated with each locations (Paragraphs 0026; 0065. User profile can be of locations and activities per the time of day and day of the week. Paragraph 0027. Infer likelihood user is in different locations. Paragraph 0040. Determine best device for relay notification. Paragraph 0063. Probabilistic profile).

As per claim 16, Horvitz, Foladare, and Singh taught the invention defined in claim 13. Horvitz further teaches the invention of wherein the incoming messages and responses are from PSTN telephone, cellular telephone, pager, fax, voice mail, e-mail or other voice or digital communication format (Paragraph 0030. Email. Paragraphs 0021; 0038. Cell phone).

As per claim 17, Horvitz, Foladare, and Singh taught the invention defined in claim 16. Horvitz further teaches the invention comprising checking the user override location in the trend analysis table and transmitting the incoming message to the user override location when set (Paragraphs 0055; 0080. The user profile indicates a preference that is used in lieu of the decision-theoretic analysis.).

As per claim 18, Horvitz teaches the invention of claim 16 comprising: contacting the user at the location with the highest probability of successful contact associated with the location. (Paragraph 0040.

Determine best device for relay notification. Paragraph 0063. Best guess about user context information.). Horvitz does not specifically teach of contacting the user at the location with second highest probability of success when unable to contact the user at the location with the highest probability of success.

Singh teaches a similar system comprising of contacting a user at the location with the second highest probability of success when unable to contact the user at a device with the highest probability of success (col. 6, lines 1-14. Send message to highest ranked device. If the subscriber doesn't access the message of the first device, the message is send to the next ranked device.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the suggested system with the teachings of Singh to contact a user at a location with the second highest probably of success when unable to contact the user at a device with the highest probability of success. The motivation for the suggested combination is that Singh's teachings would improve the suggested system by increasing the possibility that the user receives a message by forwarding the message to more than one device and ensuring that the client receives the message (col. 6, lines 14-17).

### Conclusion

The following prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- i) Abu-Hakima, US Patent #6,499,021 teaches of sending messages based on user context and sending messages based on a probability function.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing

date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joshua Joo whose telephone number is 571 272-3966. The examiner can normally be reached on Monday to Friday 7 to 4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on 571 272-1915. The fax phone number for the organization where this application or proceeding is assigned 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/J. J./  
Examiner, Art Unit 2454

/Nathan J. Flynn/  
Supervisory Patent Examiner, Art Unit 2454